CSS ORDER FULFILLMENT

DOCUMENT IDENTIFIER: A-MN-ELMF574-00-0 Rev A, 30-Jun-1989

ABSTRACT: This document describes the current operations of the Order Fulfillment group within Computer Special Systems (CSS). The expediting, tracking, and reporting responsibilities of each individual is shown, along with the group's interaction with corporate material and scheduling databases. Work Flow Diagrams are provided to show the logical, top-down flow of information through the group.

APPLICABILITY: This document applies to employees involved in Order Administration activities for Computer Special Systems, which includes the support of Traditional Products Manufacturing and Government Systems Manufacturing.

STATUS: APPROVED 30-Jun-1989; Type $VTX SMC for expiration date.

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May 1989

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Preface

This document describes Order Fulfillment responsibilities for Computer Special Systems (CSS). The Order Fulfillment group, located in Salem, New Hampshire, supports the multi-geographical businesses of CSS, Government Systems Manufacturing (GSM) and Traditional Products (TP).

1 ORDER ADMINISTRATION

1.1 REFERENCE ADMINISTRATIVE REPRESENTATIVE (DSPS/MIF)

This representative ensures that all CSS custom products have a valid price entry in DSPS and an approved part number entry on APPIX. Government Manufacturing Systems and Traditional Products part number entries are done by their respective marketing groups.

The DSPS/MIF Representative receives a copy of each quote generated by all business groups, files the quote with notations on parts that are not on DSPS or APPIX, and requests that those parts be added to the database if a purchase order is generated from that quote and approved.

Other responsibilities include the following:

- Ensure that BOMs are added to Common Scheduling
- Ensure that custom product parts are flagged as critical
- Generate a monthly report on total quotes received per business group and per category (i.e., standard and custom)
- Generate weekly report on custom quotes received for CSS Manufacturing
- Share information with other representatives
- Serve as a resource for sourcing issues
- Establish and maintain lead-time information on Price File for Fast Ship and Scheduled Ship parts

Current access to DSPS is indirect and does not allow enough data retrieval to handle inquiries without going through third parties. Automation of this process is a Q2 goal.

1.2 CUSTOMER ADMINISTRATOR - MATERIAL AVAILABILITY

This representative must match forecasts with demand and determine product availability, in order to expedite the scheduling of orders.

The Material Representative's primary tool is the ZQRL report, generated from MAXCIM, that shows forecast and demand throughout the US, GIA, Europe, and Canada. The Representative reconciles the ATPs with the Common Scheduling all-load report, then accesses Common Scheduling to make the necessary changes.

When unit production needs to be increased, the Material Representative notifies the appropriate Manufacturing Business Representative/Master Scheduler, who then deals with engineering and manufacturing to increase the units and provides new availability information back to the Material Representative.

The Material Representative generates the following internal reports:

- Outstanding MIR Report - Those orders that could not be scheduled (custom configurations, material not forecasted, and so forth.) but are being worked
- Float Report - Everything not yet scheduled, listing number of orders and dollar amounts by time range (0-9 days, 10-21, 21-30, over 30, and so forth.)

- Tech Edit Report - This notifies SST of orders requiring technical edits and configuration documentation.

The Material Representative reviews the following corporate reports for data integrity:

- Planned Partial Report - Checks forecast increases to see which orders can now be shipped earlier.
- Product Shipping Guide - Ensures that availability information is consistent with where the orders are being scheduled.

The Material Representative also alerts the Customer Administration Representatives to any current-month availability changes (less or more).

1.3 ORDER ADMINISTRATION REPRESENTATIVE

The Order Administration Representative is responsible - within specific geographies - for monitoring the progress of orders from inception through shipment and expediting any exceptions by reacting to schedule slips reported either in formal reports or by informal inquiries. The Order Administration Representative is in continual contact with most of the following groups:

- INTERNAL

  Business Groups - Engineering - Manufacturing - Purchasing - Logistics - Production Control - Finance - Sales Support Team - Marketing

- EXTERNAL (CORPORATE)

  Sales/Field CAS - MFA (front end) - MFA (execution) - Business Unit Planners - Logistics - Finance - Credit - Unit Managers - CSM (short-ship) - Headers - Material Focus Group - Area Scheduling - POM Consolidation

Four Order Administration Representatives currently administer all CSS business groups in the following areas:

- NY/NJ Area - Mid-Atlantic - Europe
- South Central - Southwest - West
- East Central - Central - Southern
- Northeast - GIA (FER/GIR/CAN) - IEG

One Order Administration Representative is assigned to GMS, and one for TP.

Three of the Order Administration Representatives have a direct support relationship with an internal Business Group. In this capacity, they attend Marketing Staff meetings to accomplish the following goals:

- Provide Order Administration information relative to new product handling
- Coordinate priority lists for orders containing parts that are temporarily unavailable
- Advise the Business Group on administrative options and processes to support budget goals

Each Order Administration Representative selects a few reports to extract the information needed to keep the orders moving. The following are the reports available to the Order Administration Representative:

- Backlog Report - Covers scheduling, shipment, pricing, and charges
- Anticipated Slip Report - If order is on slip month, Order Administration Representative notifies MFA or field agent to get a recommit to customer
- Certification Report - Covers new orders, cancellations, and changes
- Daily Reject Report - Sites that don't have B/C order status
- POM Order Report - Why orders weren't shipped (also covers short ships and fast ships)

1.4 MAXCIM ORDER ENTRY CLERK

An Activity Change Report, created from extracts drawn from Common Scheduling and System T, is generated daily by Order Execution. This individual enters into MAXCIM all scheduled orders containing NUO-sourced items.

All codes need to be verified before entries are made in MAXCIM. Several functions in the "O" Module of MAXCIM are accessed, depending on the function to be performed (reference, creating entries, changing entries).

Fast Ships and Short Ships are not included in the Activity Change Report, but are initiated through direct contact with the Order Administration reps or an Order Execution person.

2 ANALYSIS AND REPORTING

2.1 ORDER EXECUTION REPRESENTATIVE (BTA REPRESENTATIVE) - SYSTEM ORDERS

This individual verifies the data and material availability contained on all Build Transfer Authorizations (BTAs), new and any change orders, generated daily by System T, then distributes them to the appropriate areas or holds them for problem resolution. The following databases are accessed:

- Common Scheduling - verify the following:
  - — Parts are in Common Scheduling
  - — Parts are correctly sourced
  - — Correct load date
  - — Correct SEG code
  - — Correct region code
- MAXCIM Sales Order Inquiry (OEOI)

  Verify that the order is in MAXCIM and is correct.
- MAXCIM Stores Account Inquiry (INAI)

  Verify available stock.

Those that pass administrative edit are sent to Shop Floor Control (SFC) for verification of material availability, build confirming, and date of shipment. Those that are non-conforming are logged by code number and processed in the following manner:

- Short material (from MAXCIM INAI)

  Log onto MAXCIM and enter reason for delay. Distribute the resulting Problem Order Report to the Build Confirm people, the Business Units, and the Order Administration Representatives. Hold the BTA, check it daily, and send it to Logistics when the problem is resolved.
- Header Problems that are not CSS-controlled

  Incorrect BOM explosions and materials incorrectly sourced.

  Problems are added to the Header Problem Report, which is sent to the Material Focus group at WMO and the Order Administration Representatives. Hold the BTA, check it daily, and send it to SFC when the problem is resolved.
- Administrative Problem (from MAXCIM OEOI)

  Part is not in MAXCIM, or entries are wrong (dates, quantities, and so forth). Have MAXCIM entry clerk make corrections, then send to SFC.
- Sourcing Error (similar to Header Problem)

  Material in Common Scheduling is incorrectly sourced. Material on System T is incorrectly sourced.

  Absence or presence of material that affects build confirm and shipment.

Part is in the system but assigned to the wrong site. Orders added item to Header Problem Report, which is sent to the Material Focus group at WMO and the Order Administration Representatives. Hold the BTA, check it daily, and send it to SFC when the problem is resolved.

- Validation Error

  Order is not in MAXCIM. Have MAXCIM entry clerk enter order, then send to SFC.

In addition to the Problem Order Report and the Header Problem Report, this individual is now compiling the following informational reports; unless stated differently, they are prepared for the Order Administration reps, Logistics, Business Managers, and Production Managers. Also, each report is drawn from only NUO-sourced Scheduled Orders with issued BTAs.

- DEC Number Report - Lists order numbers on System T for fiscal month and previous months shipment
- Part Number Report - Same as DEC Number Report, listed by part numbers for fiscal month and previous months
- Detailed Reject Report - All orders not Build Confirmed on time (separated into geographies) with dollar amounts, customer name, transfer date, and acknowledged schedule date (for personal use in materials focus meetings)
- Part Summary Report - Same as Detailed Reject Report, but separated by Headers and not showing DEC Numbers
- Reject Summary - Same as Detailed Reject Report, but listing geographies, headers, amount of orders, and dollar amounts (for Order Administration supervisors only)
- Build Confirm Status Report - Orders due to be Build Confirmed today, with Build Confirm status (for Logistics and Order Execution people)
- Materials Worksheet - Similar to Part Number Report, but listing only the Build Confirm status and Quantity of each Part Number (for Production)

2.2 ORDER EXECUTION REPRESENTATIVE (BTA REPRESENTATIVE) - OPTIONS, FAST SHIP, SHORT SHIP

This individual performs the same BTA verification for the Options business (CPU type or Manufacturing Capacity Code), including logging errors and tracking their resolution. This individual also processes orders that bypass the normal Scheduled Order routing (Fast Ship, Short Ship).

- Fast Ship - Receive Picking and Billing Authorization (PBA) twice daily, have MAXCIM entry clerk process BTAs, enter part number into MAXCIM. OESP, then sent to Shipping.
- Short Ship - Receive form from Order Administration rep and process like a Fast Ship.

2.3 SENIOR ORDER SPECIALIST - ORDER MANAGEMENT PROCESS AND TOOLS

The overall, primary function involves process changes from manual order management to cost-effective systemic tools and controls for operational excellence. Included is the ongoing management of orders and customer specific data to effectively work Customer Satisfaction issues, expeditious order control, and management information on a daily basis. Once developed, the tools are used by Order Administration and all order processing cross-functional groups in NUO.

This individual prepares several informational and transactional reports for the CAS group by accessing the Inquiry Data Warehouse (IDW), a backlog file, and a Master Item File (MIF) extract. The IDW allows access to extract files from Common Scheduling and System T. These daily performance and activity reports provide CAS managers, Order Administration reps, and MAXCIM entry clerks with the information needed to enter, track, and manage load from the time an order is booked to its final shipment.

The following reports are a sampling of those written from data on sourced orders:

- System T Performance Report
  (Informational - Distributed to managers)

  Count of orders, passed to System T, due in the current fiscal month, and sorted as follows:

  — Sheet 1: Ship Summary - Shipped and Unshipped, by scheduled week

  — Sheet 2: Order Status - Not Build Confirmed, Build Confirmed but not Shipped, Site Shipped, or Consolidation Shipped

  — Sheet 3: Containing parts with no MLP on Master Item File (MIF)

- Activity Change Report
  (Transactional - Distributed to MAXCIM entry clerk)

  Detailed changes in Common Scheduling and System T since the previous day. All new, cancelled, or changed orders are included.

- Scheduled Orders Build Confirmed but Kit Rejected
  (Informational - Distributed to Order Administration reps and P.C.)

  Contains orders and parts that are Build Confirmed and one or more sites have not Build Confirmed, thus holding up the order.

- All Scheduled Orders Not Build Confirmed
  (Informational - Distributed to Order Administration reps)

  Orders not Build Confirmed, sorted by Order Administration Representative and Acknowledged Ship Date

- Summary Load Report (US and Foreign)
  (Informational - Distributed to Senior Reporting Specialist)

  Unshipped orders (Float, Backlog, Scheduled) sorted by geography and by business groups, including orders shipped but not invoiced (Shibni) and Shipped orders also sorted by geography and business group.

- Ad hoc reports
  (Informational - Distributed to managers)

  Special reports generated within specific parameters.

2.4 ORDER EXECUTION REPORTING

This individual generates several informational reports on a weekly or monthly basis. These reports are drawn from the Country Information Center (CIC) for US orders, the Central Business Unit in Geneva for European orders, and separate reports from each business group for GIA (and sometimes Europe) orders.

Distribution may be CSS worldwide, CSS local, or site-specific. In addition to ad hoc presentations of reports and graphics, the following reports are regularly generated:

- Certs and Off-the-Dock Report (Weekly to CSS worldwide)
  - — Certs dollar values (cums by week, month, and year)
  - — Week's shipment dollar values (with cums by month and year)

  This report also triggers a graph showing QTD shipments per percentage of goals (for staff meetings).
- Backlog Report (Monthly to CSS worldwide)

  Backlog dollar amounts, as well as QTD and YTD shipments (from OTD Report)
- CAS Load Report (Weekly to CSS business locals)
  - — Sheet 1: Total Load for current quarter, what has been shipped, what is to be shipped
  - — Sheet 2: Float Orders with Customer Request Date this quarter and beyond
  - — Sheet 3: Scheduled Orders for next quarter only
- CSS Actual Slips (Monthly to Material Focus Group and headers at WMO and CSS business units)

  Slip Orders, showing the part that is holding up the order. This report is drawn from Logistics, Order Administration reps, and Order Execution people.
- Late Backlog Report (Monthly to supervisor)

  Compilation of Order Administration Representatives reports on what has slipped and why, for supervisor to work issues with MIS people.

3 @ DECnumber PROCESS

The @ DECnumber part number process is an accounting process that assigns a unique manufacturing part number to a collection of line items on an order so it can be tech editied, scheduled, integrated and tested as a unit while allowing manufacturing to properly relieve inventory and apply labor and overhead costs.

This process is used to identify a subset of the total lines on an order, meaning the parts that will be integrated on the production floor, and is dependent on the configuration.

Without this process, manufacturing would not be able to schedule the order, kit the required material, and issue the work order to the Systems Integration Group (SIG) area and charge labor.

This process allows certain kinds of orders to be scheduled on Common Scheduling and on the MRPII system.

Computer Special Systems (CSS) and Government Manufacturing Systems (GMS) use this process for configurable orders (orders that require a technical configuration showing integratable line items.)

3.1 @ DECnumber ORDER ADMINISTRATION

When the Order Administration scheduler receives a request for schedule, [Materials Increase Request (MIR)], from Corporate Area Scheduling, a copy of the order with a cover sheet attached, is sent to the Sales Support Team (SST) for configuration.

The Order Administration Representative receives completed configuration drawings and technical information (along with their comments) from SST, and specifies any change(s) if necessary. Then, the configuration with a copy of the Common Scheduling printout is forwarded to Process Engineering (PE). Refer to heading 4 for information on the Tech/Edit Configuration Functionality.

When SST forwards the configuration back to Order Administration and it requires a change, Order Administration will not stop the PE function. The Order Administration Representative assumes the responsibility for ensuring changes happen. The Representative shall mark the paperwork with changes for PE so they can operate under the premise the change is being made.

If changes are required by the PE group, the Order Administration Representative is notified. The PE functions shall continue while the changes are being pursued.

The Order Administration Representative checks MAXCIM daily to determine if the Bill Of Material Inquiry (BMMI) is up and notifies The Order Administration Scheduler. The Scheduler forwards the Material Increase Request (MIR) to Master Scheduling for a schedule date, and answers a MIR to Corporate Area Scheduling.

3.2 MATERIAL INCREASE REQUESTS

A Materials Increase Request is required whenever a part number is flagged as "critical" on Common Scheduling. "Critical" is defined as a systems flag set by CSS in Common Scheduling that causes an order to be processed manually in order to be scheduled.

The Order Administration group is responsible for processing MIRs and to get orders scheduled. MIRs should be processed in two days or less.

The Order Administration Scheduler is measured by the response to a MIR within two days. The Scheduler monitors the process to assure the MIR measurement is met.

3.3 MIR ESCALATION PROCESS

Every Monday, the order scheduler electronically sends a MIR report to management to inform them of any orders that have not been scheduled within the two-day goal. Note that this goal is five days for GIA orders. This report is primarily used to capture information that an order cannot be scheduled, and states the problems and the projection date of correction.

Depending on the type of problem, various groups are responsible to own the resolution. The following types of categories represent the problems typically found.

Problem Type	Responsible Group
Order Problem (sourcing, change orders, configuration)	OA Representatives with SST and Process Engineering
Materials (shortage)	Master Scheduling/Materials
@DECnumber	Process Engineering

If resolution does not occur within the required timeframe, the process for escalation is in writing to communicate the information to the Material Order Administration Manager. If this doesn't correct the matter, further escalation to the CSS Order Fulfillment Manager and Plant Manager may be required.

Outstanding MIRs are also discussed at the Customer Issues Forum due to the impact on Customer Satisfaction.

3.4 THE OVERALL PROCESS FLOW

- Corporate Area Scheduling calls Order Administration with a MIR.
- CSS scheduling generates the MIR report to identify additional daily DEC numbers that required configuration drawings. Send report to SST, SST pulls order look-ups from Common Scheduling.
- The completed configuration from SST is sent back to Order Administration manually or by electronic mail.
- The Order Administration Representative requests any change(s), if required, from field CAS.
- The configuration and a copy of the Common Scheduling printout is forwarded to Process Engineering.
- PE completes part number request form and sends it to IPMS for approval.
- Order Adminstration checks @ DECnumber on MAXCIM, and the Order Administration Scheduler send the MIR to the Master Scheduler.
- After IPMS approval, the part number routing is checked on MAXCIM, and shop floor schedule is set.
- Check that all part numbers have standard costs. If not, add standard costs.

- Copies then go to PC.
- If all part numbers have standard, a standard cost is set, and the shop floor schedule is set.
- Once the Master Scheduling sets scheduling date, the Material Requirements Process Begins and it either goes to the shop floor schedule set for the order to be built, or the order is built.
- After the order is built, it is inspected, and SIG dock puts in F/G.
- The order is build confirmed on System T.
- S/A received from T.
- Order Shipped to POM consolidation.

4 CSS TECH EDIT/CONFIGURATION FUNCTIONALITY

CSS will support Tech Edit/Configuration functionality in a decentralized manner through existing groups and/or functions. Some portion of the technical validation of orders to support Traditional Products and Government Systems Manufacturing will be contracted to the Mid-range System Header (MSH).

4.1 OVERALL GOALS

- Use groups within CSS to perform the tasks necessary to configure and validate all products and systems that require this to provide information for the production process. This includes the development of BOMs and the identification of parts sourced to CSS.
- In line with OTP, the overall tech edit function will eliminate the "checking" of the work of others and strive to improve the automated tools and information necessary to "do it right the first time."
- Establish a controlled process that monitors quality and performance and provides feedback on a regular basis.
- Any functionality that can move to the field will begin to transfer during FY91.

4.2 TECHNICAL EDIT PROCESS

The Order Adminstation Scheduler identifies orders that require tech editing per the agreed to list of products or custom order type on the following list:

Product	Part Number
Mira	DS-630Qx-xx, DS650Qx-xx, DS183Qx-xx
DECvoice	DTCAA-AA, DTCAA-BA, DTCAA-CA
IP11	IPV12-AA, IPV12-AD, IP112-xx
Fatbox	CL-LX44A-EK, CL-LX37A-EK, CL-LX46A-EK

These orders cannot be scheduled until a technical validation is done.

Change orders are handled as follows:

- The OA scheduler generates a daily report of these orders and forward the decnumbers to SST via this daily electronic mail message.
- SST does a Common Scheduling look-up of each decnumber and prints out the line items. They will use whatever tools and technical information is available to determine the correctness of the order, and if no problems exist they will generate a document or drawing that contains the information necessary to assemble and test the order. This includes the identification of all items necessary to be integrated in CSS production, which is in some cases a subset of the total order. Refer to the @ DECnumber part number process for information on the identification of integrated line items.
- SST will electronically transmit the configuration information back to Order Administration within two working days. The scheduling person logs in the receipt of the information to enable the turnaround time to be measured and reported.

4.3 EXCEPTION PROCESS

If SST finds that an order is "dirty" (not technically correct) and action must be taken to correct it (for example, add line items, expansion cabs, and so forth), the two-day turnaround cannot be met in all cases. SST will notify OA (the respective Order Administration Representative) of problems on these orders when found and SST will own the responsibility to work closure on these with the Field. OA provides support as required. If corrective action is not resolved within five working days, the problem will be escalated to the OA and the SST manager.

4.4 CHANGE ORDER PROCESS

If a change order is required, SST will note that and the Order Administration Representative is responsible to contact the field.

4.4.1 Incorrect Parts on Order

If a change order is needed to correct the configuration, SST will identify the corrections required and notify the OA Representative. SST is responsible to contact the field so the change order is initiated. The OA Representative is also responsible to follow through on the change order internally.

4.4.2 Change Order Occurs After Order is Scheduled or While the Order is in Production

The change order impact on the configuration must be assessed by SST due to the possible revisions to routings, BOMs, and so forth. OA is responsible for notifying SST of change orders, and follow-up on any resulting documentation changes.

4.4.3 Technical Edit and Configuration Support Terminology

Quote Preparation - Negotiations with the customer require technical inputs to ensure that the configuration is correct and that all component parts and operating systems are identified and quoted. For corporate products, this is done in the field by Field OMS. For CSS, TP,and GMG, this is done in the engineering and business groups for the majority of products and orders.

Order Validation (technical) - Prior to certing and scheduling, the customer purchase order must be validated technically and to ensure that obsolete/unavailable material is not ordered. This work on corporate products is being shifted in the field to the quote preparation stage so only valid quotes are given to customers, the order if received, is on file and it is not necessary to validate again.

Configuration Information/Drawings - The production floor requires a detailed diagram of where options mount, cables are located, and that important address and vector information is included to ensure that the product or system is built exactly as required and in conformance with DEC engineering standards and the quote.

CSS (Seg Codes) Sourcing - This activity would determine the CSS-sourced items on the order based on the configuration, and the revenue received for products integrated.

MAXCIM BOM - This activity takes the line items sourced to CSS and creates a MAXCIM BOM.

Technical Support - The SST group provides a "hot-line" for the field on technical information for CSS products.

4.5 SUPPORT MATRIX

The following matrices determine which group or function performs the necessary tasks by product or system and the success criteria for the stated deliverables.

CSS Products/Systems:

a. Configured Options- DT07, IP11, DECdataway, comm. gear (muxservers, muxmodems, and so forth)

b. Configured Systems - Mira, Fatbox, DECvoice

c. Custom Orders - ISG, PGG, NSG

d. Traditional Products (B2-xxxxx-xx)

e. Government Mfg. Group Products (RF-xxxxx-xx)

f. Government Mfg. Group Programs (with/without CCDs)

Table 1: A. - Configured Options (DT07, IP11, and so forth)

Requirement	Supplied by	Deliverable	Turnaround	Customer	Comments
Quote	SST	Information and formal quote	1 day	Field	
Validate	SST	clean order problem ID	1 day	OA/Mfg.	
Information/Drawing	SST	Configuration Drawing	1 day		
Sourcing	N/A				
BOM	Process Eng.	MAXCIM BOM		Master Sched.	
Support	SST	Tech. info.	Same day	Field, Customer	

Table 2: B. - Configured Systems - (Mira, Fatbox, DECvoice)

Requirement	Supplied by	Deliverable	Turnaround	Customer	Comments
Quote	SST	Formal quote	1 day	Field	Avg. 2-4 hrs.
Validate	SST	clean order problem ID	2 days		
Information/Drawing	SST	Configuration Drawing form	2 days		
Sourcing	SST	Sourcing Info.			
BOM	Process Eng.	MAXCIM BOM		Master Sched.	
Support	SST	Tech. info.	Same day	Field, Customer	

Table 3: C. - Custom Orders - ISG, PGG, NSG

Requirement	Supplied by	Deliverable	Turnaround	Customer	Comments
Quote	CSS Mfg Eng	Quote pkg.			
Validate	CSS Mfg Eng				
Information/Drawing	CSS Mfg Eng	Quote Pkg.			
Sourcing	CSS Mfg Eng	Routing			
BOM	Process Eng.	MAXCIM BOM		Master Sched.	
Support	CSS Bus.				

Table 4: D. - Traditional Products - (B2-xxxxx-xx)

Requirement	Supplied by	Deliverable	Turnaround	Customer	Comments
Quote	TP Marketing	Information			
Validate	MS Header				
Information/Drawing	MS Header	XCON output	24 hours	Sched.	
Sourcing	N/A				
BOM	Process Eng.			Master Sched.	
Support	TP Marketing				

Table 5: E. - GMG Products - Tempest

Requirement	Supplied by	Deliverable	Turnaround	Customer	Comments
Quote	GSG Marketing				
Validate	MS Header				
Information/Drawing	MS Header	XCON output	24 hours	Sched.	
Sourcing	Scheduling			Process Eng.	Check!
BOM	Process Eng.			Master Sched.	
Support	GSG Eng.				

Table 6: F. - GMG Programs (some % have CCD packages)

Requirement	Supplied by	Deliverable	Turnaround	Customer	Comments
Quote	GSG Marketing				
Validate	MS Header				
Information/Drawing	MS Header	Drawing (CDD pkg)			
Sourcing	Scheduling			Process Eng.	Check!
BOM	Process Eng.			Master Sched.	
Support	GSG Eng.				

4.5.1 Related Support

- XCON use - This effort will continue to be driven by US CMC and SST.
- Automation - SST and Mfg. Eng will own developing improved tools.
- C. Process Improvements - Process Engineering will develop process improvements.

5 CSS INTERNATIONAL PROCESS

The Material Order Administation group reports to the Salem Order Fulfillment group and supports all European and GIA CSS manufacturing groups' CSS materials requirements. This includes finished goods and some of the total components requirements to support the revenue requirements. These groups order materials directly from CSS since CSS has the licenses to export materials into specific countries.

5.1 FORECASTING

The international CSS business groups develop a 12 month rolling forecast of the materials they need. Once within the 13 week window, material demands will be placed on suppliers and product will be produced within the Salem plant. Material will be built per the forecast, even though purchase orders must be generated by the proper groups at a point 6 weeks prior to shipment. All international sites, for example, Annecy, Solent, Munich, Tokyo and Sydney submit formal forecasts monthly by week 2, day 3, using various modes. For example, Australia and Tokyo send electronic mail while the material representative for Latin American Caribbean Regions (LACR) and India participates in staff meetings talking directly to their sales people. The LACR and India forecast is generated based on the discussion at the meeting. The FER forecast is developed from information from Hong Kong sales and trend analysis by the GIA business representative.

5.2 MATERIAL ORDER ENTRY

The analysts in the Material Order Administration group enter the forecasts into the MAX-CIM system and enter a Sales Order to support the purchase orders. The data entry function is responsible to ensure that all parts are on the Master Parts File (INPMS) in MAXCIM. The turnaround time is one day unless the parts are not on INPMS, and then the average turnaround time is three days. The Business Representatives are responsible to ensure on-time delivery to the requesting CSS group.

Special requests are also handled by this group. The analysts support both GIA and Europe.

5.3 DECnumber ORDER SUPPORT

Revenue orders are processed for Europe and GIA CSS sites within the geographies except for the Far East, LACR and India. For these geographies, the order is routed through GIA headquarters to the CSS Order Fulfillment group in Salem for execution. Materials orders on Salem will result from the receipt of DECnumber orders. These orders should consume the stocked material built per the prior forecasts. The participation of the Material Order representative at the business meetings develops the future materials requirements at a macro level, but actual revenue shipments will create material moving from stockroom to stockroom. In the case of the Far East region, PASO is used as a consolidation location for CSS finished goods.

5.4 ISRAELI ORDER FLOW

All orders for Israel must ship through the U.S. because of a grant program established by the U.S. government. Product manufactured in the U.S., GIA or Europe must be shipped from Salem. There is currently no CSS business unit assigned to forecast demand and all Israeli orders ship based on availability. Orders for European products have particularly long lead-times as a result of having no forecast.

5.5 ANALYSIS

MAXCIM OEOI reports are used to determine the open sales orders including backlog and uncommitted material. Each remoted group has a separate report which is used by the material order representatives to determine where expediting must occur.

5.6 REPORTING

Weekly reports are completed that track off-the-dock shipping performance to each site. These reports track the actual day of shipment and are distributed to each international site Materials Manager and Materials planner and to the Salem Materials Staff.

Starting in Q1FY90, reports will be generated to measure how well CSS international business groups are forecasting materials needs.

Figure 1: Material Orders Process

6 WORK FLOW DIAGRAMS

Figure 2: Overall Process

Figure 3: Process Flow - CSS Tech Edit

Figure 4: @DECnumber Process

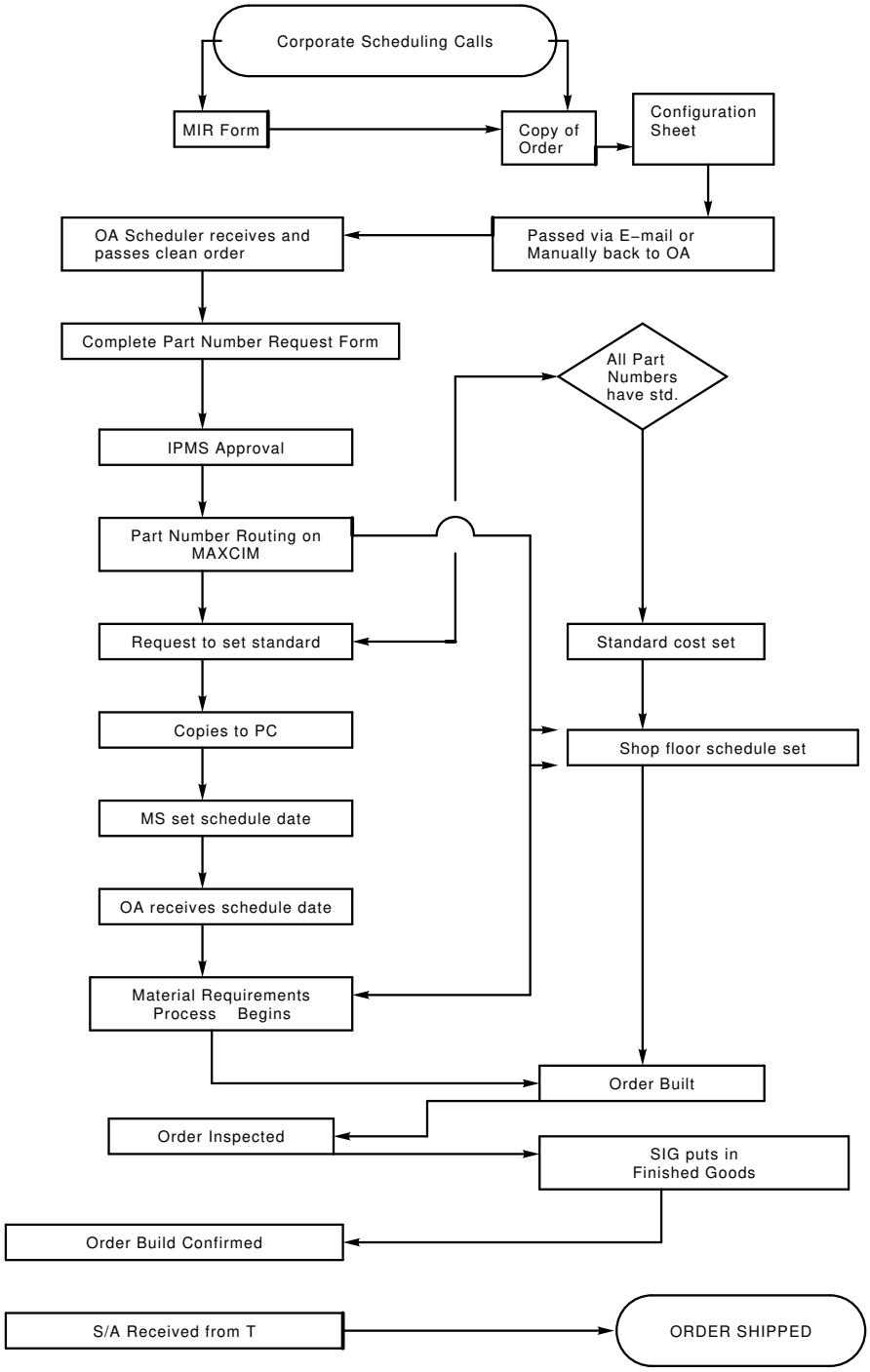

Figure 5: Traditional Products/Government Manufacturing Group Process Flow

Figure 6: Process Custom Quotes

Figure 7: Manage Float Quotes

Figure 8: Manage Scheduled Orders

Figure 9: Load Orders Into Maxcim

Figure 10: Salem Tech Edit

GLOSSARY

APPIX: Automated Parts and Products Information Exchange

ATP: Available to Promise

ASK/MANMAN: Traditional Products MRPII System

BMI: Bill of Material Inquiry

BOD: Operations Budget (Board of Directors)

BOM: Bill of Materials

BTA: Build Transfer Authorization

CAS: Customer Administration Support

CIC: Country Information Center

Common Scheduling: Corporate Scheduling System

Configurable Orders: An order that requires a technical configuration showing integratable line items.

Critical: a systems flag set by CSS in Common Scheduling that causes an order to be processed manually in order to be scheduled.

CSI: Customer System Integration

CSS: Customer Special Systems

DIAL: Digital Idle Access Listing

DSPS/MIF: Digital/Master Item File - Reference files where orders are kept for execution.

F/G: Finished Goods

FOCUS: Field Organization Customer Support

GIA: General International Area

GMG: Government Manufacturing Group

INAI: MAXCIM report

IDW: Inquiry Date Warehouse

IPMS: Internal Part Master Scheduling

ME: Manufacturing Engineering

Order Administration: Manufacturing Field Administration

MIR: Materials Increase Request. Required whenever a part number is flagged as "critical" on Common Scheduling.

MIRA: Micro System Implementation of a Reliable Architecture. Two duplicate master and standby MicroVAX II computer systems with no single point of failure. It is designed for applications that demand continuity of operation. Available in small or large versions.

MS: Master Scheduling - Internal function within CSS to support MAXCIM

NPSU: New Product Start-Up

OEOI: MAXCIM Module

OPCSS: CSS source code

OPTIO: CSS source code

OTD: Off the Dock

PBA: Picking and Billing Authorization

PC: Production Control

PE: Process Engineering

POM: Point of Manufacture

QTD: Quarter-to-Date

S/A: Ship Authorization

SBA: Serialized Shipping and Billing Authorization

SIG: Systems Integration Group

SST: Sales Support Team

TP: Traditional Products

UOF: Unusual Order Form

XCON: Expert Configuration System

YTD: Year-to-Date

ZQRL: MAXCIM report